This Listing of Claims will replace all prior versions, and listings, of claims in this

application:

Listing of Claims:

1. (currently amended): A customer information management system comprising:

a first acquisition block obtaining image information of a customer having purchased an

item;

an attribute determination block determining a first attribute group of said customer from

information obtained from the image without determining a personal identity of a particular

individual in the image said image information obtained and information not based on a

particular individual;

a second acquisition block obtaining data of said item purchased by said customer; and

a recording block recording said data of said item obtained and said first attribute group

of said customer determined, said data and said first attribute group being correlated with each

other.

2. (original): The customer information management system of claim 1, wherein

said recording block further records a second attribute of said customer, said second attribute

being correlated with said data of said item obtained, said second attribute being determined

through a human perception.

- 3. (original): The customer information management system of claim 1, further comprising an analysis block using said data of said item recorded and said attribute of said customer to provide a data analysis.
- 4. (original): The customer information management system of claim 3, wherein said data analysis includes one of a data analysis about the attribute for each item and a data analysis about the item data for each purchaser attribute.
- 5. (currently amended): A customer information management method comprising the steps of:

obtaining image information of a customer having purchased an item;

determining a first attribute group of said customer from <u>information obtained from the</u>

<u>image without determining a personal identity of a particular individual in the image said image</u>

<u>information obtained and information not based on a particular individual;</u>

obtaining data of said item purchased by said customer; and

recording said data of said item obtained and said first attribute group of said customer determined, said data and said first attribute group being correlated with each other.

6. (currently amended): A computer-readable recording medium having recorded therein a customer information management program causing a computer to execute the steps of: obtaining image information of a customer having purchased an item;

determining a first attribute group of said customer from <u>information obtained from the</u>

<u>image without determining a personal identity of a particular individual in the image said image</u>

<u>information obtained and information not based on a particular individual;</u>

obtaining data of said item purchased by said customer; and

recording said data of said item obtained and said first attribute group of said customer determined, said data and said first attribute group being correlated with each other.

7. (withdrawn): A customer information management system comprising:

a first image acquisition block obtaining image information of a shopper entering a shop;

a second image acquisition block obtaining image information of a shopper having

purchased an item;

a first extraction block referring to said image information obtained by said first image acquisition block and said image information obtained by said second image acquisition block, to extract image information obtained exclusively by said first image acquisition block and absent from said second image acquisition block;

an attribute acquisition block obtaining an attribute of a shopper corresponding to said image information extracted; and

a recording block recording information indicative of a non-purchaser and said attribute obtained, said information and said attribute being correlated with each other.

8. (withdrawn): The customer information management system of claim 7, wherein said attribute acquisition block includes a first determination block determining on the basis of

said image information extracted said attribute of said shopper corresponding to said image information extracted.

9. (withdrawn): The customer information management system of claim 7, further comprising:

an item data acquisition block obtaining data of said item purchased by said shopper corresponding to said image information obtained by said second image acquisition block; and

a second determination block determining an attribute of said shopper on the basis of said image information obtained by said second image acquisition block,

wherein said recording block further records information indicative of a purchaser, said data of said item obtained, and said attribute determined by said second acquisition block, said information, said data and said attribute being correlated with each other.

- 10. (withdrawn): The customer information management system of claim 7, further comprising an analysis block providing a data analysis based on data recorded in said recording block.
- 11. (withdrawn): The customer information management system of claim 10, wherein said data analysis includes a data analysis about an item data for each purchaser attribute and a data analysis about an attribute for each of a purchaser and a non-purchaser.

Attorney's Docket No. <u>009683-379</u>

Application No. <u>09/904,528</u>

Page 7

12. (withdrawn): The customer information management system of claim 10, wherein

if said recording block records data received from a plurality of shops said analysis block uses

said data of said plurality of shops recorded in said recording block to provide a data analysis to

develop a strategy for each shop.

13. (withdrawn): A customer information management method comprising the steps

of:

obtaining image information of customers entering a shop;

obtaining image information of customers having purchased an item;

comparing said image information obtained in the step of obtaining said image

information of said customers entering said shop and said image information obtained in the step

of obtaining said image information of said customers having purchased said item, and extracting

image information of a customer whose image information was obtained only when entering said

shop;

obtaining an attribute of a customer corresponding to said image information extracted;

and

for said customer corresponding to said image information extracted, recording

information indicative of a non-purchaser and said attribute obtained, said information and said

attribute being correlated with each other.

14. (withdrawn): A computer-readable recording medium having recorded therein a

customer information management program causing a computer to execute the steps of:

obtaining image information of customers entering a shop:

obtaining image information of customers having purchased an item;

comparing said image information obtained in the step of obtaining said image information of said customers entering said shop and said image information obtained in the step of obtaining said image information of said customers having purchased said item, and extracting image information of a customer whose image information was obtained only when entering said shop;

obtaining an attribute of a customer corresponding to said image information extracted; and

for said customer corresponding to said image information extracted, recording information indicative of a non-purchaser and said attribute obtained, said information and said attribute being correlated with each other.

15. (withdrawn): A customer information management system comprising:

a recording block recording image information of a shopper of a shop and a number of said shopper's appearance in said shop, said image information and said number being correlated with each other;

an acquisition block obtaining image information of a shopper entering said shop; a comparison block comparing said image information recorded in said recording block and said image information obtained with each other to determine whether said image

information match each other;

Attorney's Docket No. 009683-379

Application No. <u>09/904,528</u>

Page 9

an increment block incrementing by one a number of appearance in said shop recorded

and corresponding to said image information recorded in said recording block and matching said

image information obtained; and

an addition block adding to said recording block said image information obtained, if a

comparison made by said comparison block reveals that said recording block does not have

image information matching said image information obtained.

16. (withdrawn): The customer information management system of claim 15, further

comprising a determination block referring to said number recorded in said recording block, to

determine whether said shopper is a regular shopper or a new shopper, said determination block

determining that said shopper is a regular shopper if said number has at least a predetermined

value for a predetermined period of time, said determining block determining that said shopper is

a new shopper if said number is less than said predetermined value for said predetermined period

of time.

17. (withdrawn): The customer information management system of claim 15, further

comprising an extraction block extracting feature data from image data of a shopper whose image

information is obtained, wherein said image information obtained by said acquisition block is

said feature data extracted by said extraction block.

18. (withdrawn): The customer information management system of claim 15, further

comprising an item data acquisition block obtaining data of an item purchased by a shopper,

Attorney's Docket No. 009683-379

Application No. <u>09/904,528</u>

Page 10

wherein said recording block further records said data of said item obtained, said data being

correlated with said image information of said shopper and said number.

19. (withdrawn): The customer information management system of claim 15, further

comprising an analysis block providing a data analysis based on data recorded in said recording

block.

20. (withdrawn): The customer information management system of claim 19, wherein

said data analysis includes a data analysis about the item data for each of regular and new

shoppers.

21. (withdrawn): The customer information management system of claim 19, wherein

if said recording block records data received from a plurality of shops, said analysis block uses

said data of said plurality of shops in said recording block to provide said data analysis to

develop a strategy for each shop.

22. (withdrawn): A customer information management method comprising the steps

of:

recording image information of a customer of a shop and a number of said customer's

appearance in said shop, said image information and said number being correlated with each

other;

obtaining image information of a customer entering said shop;

comparing said image information recorded in the step of recording and said image information obtained with each other to determine whether said image information match each other;

incrementing by one a number of appearance in said shop recorded and corresponding to said image information recorded in the step of recording and found to match said image information obtained; and

adding to said recording block said image information obtained, if a comparison made in the step of comparing reveals that said image information recorded in the step of recording do not include image information matching said image information obtained.

23. (withdrawn): A computer-readable recording medium having recorded therein a customer information management program causing a computer to execute the steps of:

recording image information of a customer of a shop and a number of said customer's appearance in said shop, said image information and said number being correlated with each other;

obtaining image information of a customer entering said shop;

comparing said image information recorded in the step of recording and said image information obtained with each other to determine whether said image information match each other;

incrementing by one a number of appearance in said shop recorded and corresponding to said image information recorded in the step of recording and found to match said image information obtained; and

adding to said recording block said image information obtained, if a comparison made in the step of comparing reveals that said image information recorded in the step of recording do not include image information matching said image information obtained.

24. (currently amended): A customer information management system comprising: a camera system obtaining image information of a customer in a shop to generate an image signal indicating an image of said customer;

a first processor receiving said image signal to determine an attribute group of said customer on the basis of information obtained from the image without determining a personal identity of a particular individual in the image said image and information not based on a particular individual;

a first input unit receiving information of an item purchased in the shop by said customer; and

a first storing section storing said information of said item received and said attribute group of said customer determined, said information and said attribute group being correlated with each other.

25. (previously presented): The customer information management system of claim 24, wherein said camera system is arranged at a predetermined position and obtains image information of said customer at a predetermined timing.

Attorney's Docket No. 009683-379

Application No. 09/904,528

Page 13

26. (previously presented): The customer information management system of claim

25, wherein said position is suitable for obtaining image information of a face of said customer.

27. (previously presented): The customer information management system of claim

24, wherein said attribute group includes at least one of gender and age.

28. (original): The customer information management system of claim 24, wherein

said information of said item includes a name of said item.

29. (previously presented): The customer information management system of claim

24, wherein said camera system, said first processor, said first input unit and said first storing

section are installed inside said shop.

30. (previously presented): The customer information management system of claim

24, further comprising a second input unit receiving an attribute of said customer, wherein said

first storing section further stores an attribute input via a second input unit and different from

said attribute group determined in said first processor.

31. (previously presented): The customer information management system of claim

24, further comprising a second processor providing a data analysis based on said information of

said item recorded and said attribute of said customer, wherein said camera system, said first

processor, said first input unit and said first storing section are arranged inside said shop as an

internal device and said second processor is arranged outside said shop and capable of

communicating with said internal device.

32. (previously presented): The customer information management system of claim

24, wherein:

said camera system includes a first camera obtaining image information of a customer

having entered said shop and a second camera obtaining image information of a customer having

purchased an item;

said first processor receives said image signal generated by said first camera and an image

signal generated by said second camera, to determine an attribute of a customer having an image

indicated by an image signal generated by said first camera but not by any image signal generated

by said second camera; and

said first storing section further stores information indicating that said customer is a non-

purchaser, said information being added to said determined attribute of said customer.

33. (original): The customer information management system of claim 32, wherein

said first camera is positioned in a vicinity of an entrance of said shop and said second camera is

positioned in a vicinity of a cash desk of said shop.

34. (previously presented): The customer information management system of claim

24, wherein:

said camera system includes a first camera obtaining image information of a customer

having entered said shop and a second camera obtaining image information of a customer having

purchased an item;

said first processor receives said image signal generated by said first camera and an image

signal generated by said second camera, to determine an attribute of a customer having an image

indicated by an image signal generated by said first camera but not by any image signal generated

by said second camera; and

said first storing section further stores information indicating that said customer is a

purchaser, said information being added to said determined attribute of said customer.

35. (previously presented): The customer information management system of claim

24, further comprising:

a second recording block recording an image signal representative of a customer of a shop

and a number of said customer's appearance in said shop, said image signal representative of said

customer and said number being correlated with each other; and

a third processor incrementing by one said number correlated with said image signal

recorded in said second recording block and found to match said image signal generated by said

camera.

Attorney's Docket No. <u>009683-379</u>

Application No. <u>09/904,528</u>

Page 16

36. (previously presented): The customer information management system of claim

35, wherein said third processor additionally records in said second recording block said image

signal of said customer generated by said camera system if said image signal of said customer

generated by said camera system is not present in said second recording block.